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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/726,493

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Marinus Struik

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EXAMINER

CHOUDHURY, AZIZUL Q

ART UNIT

PAPER NUMBER

2145

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/726,493	Applicant(s) STRUIK, MARINUS	
	Examiner AZIZUL CHOUDHURY	Art Unit 2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/7/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 10 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 12-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/7/08</u> . | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

This office action is in response to the correspondence received on January 7, 2008.

Full faith and credit is bestowed upon the work of the previous examiner.

Election/Restrictions

Applicant's election with traverse of claims 1-9 in the reply filed on January 7, 2008 is acknowledged. The traversal is on the ground(s) that the inventions of claims 10 and 11 are of the same art as the inventions of claims 1-9. In particular, the applicant contends that claim 10 is directed to a wireless device with decryption but since no details of the decryption are provided, it is therefore a generic function used in communication. In addition, the applicant further contends that a search for claim 1 would require a search through the art directed to wireless devices. Furthermore, the applicant also contends that claim 11 is directed to the sender that is referred to in the method claim (claim 1).

The examiner does not find these arguments persuasive because despite all the arguments, claims 10 and 11 were primarily restricted for their inclusion of encryption/decryption. No other claims feature this claim limitation. Despite the applicant's arguments, encryption/decryption means are not merely generic functions used in communication. Just because details are not provided within the claims as to the actual functions occurring for the encryption/decryption does not make it a default operation within data communications. It would be deemed a burden upon the examiner to have to examine these claims and this is further evidenced by the fact that

a separate class exists for decryption and encryption. Hence, the examiner does not believe the election/restriction requirement to be improper.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Claim 7 has been listed twice, once as being "currently amended" and once as being "cancelled." The examiner is proceeding with the examination of the case under the assumption that Claim 7's status is "currently amended" and that the cancellation erroneously occurred in the process of correcting previous improper numbering of claims. Appropriate corrections are required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim features the terms "subsequently" and

"periodically." It is unclear as to what amount properly constitutes "subsequently" and "periodically."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 and 12-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Brightwell (US Patent Number: 5,265,103) in view of Fauconnier et al (US Patent Number: 6,909,887), hereafter referred to as Brightwell and Fauconnier, respectively.

1. With regards to claim 1, Brightwell teaches through Fauconnier, a method of representing a frame counter used in communication between a sender and a receiver, the frame counter having a first component representing an encoded frame counter and a second component representing a sequence counter, the method comprising the steps of: a) maintaining said sequence counter and frame counter at the sender (*Brightwell teaches messages to be transmitted (i.e. at the sender) are grouped into frames and sequenced; see column 1, lines 46-50 and column 2, lines 31-32, Brightwell*); b) establishing an updated value of the frame counter as the next value in a direction of counting from the current value of the frame counter that is congruent to the sequence counter modulo the size

of the sequence counter (*Brightwell teaches the incrementing of the sequence counter for each frame; see column 4, lines 10-15 and column 2, lines 54-57, Brightwell*); and c) computing an encoded value of the frame counter by removing from the frame counter (50) a component equal to the value of the sequence counter such that the updated frame counter is uniquely recoverable from said encoded value of the frame counter and said sequence counter (see *column 3, lines 13-26, Brightwell*).

While the Brightwell reference does teach the counting of frames, it does not explicitly cite the counting of frames congruent modulo of the sequence counter size. In the same field of endeavor, Fauconnier teaches such a calculation; see column 10, line 25, Fauconnier. Such calculations help break down packets into sizes that help communication flow. Therefore it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Brightwell with those of Fauconnier for controlling communication; see column 7, lines 26-30, Fauconnier.

2. With regards to claim 2, Brightwell teaches through Fauconnier a method wherein the sequence counter is updated each time a message is sent (see *column 3, lines 65-68, Brightwell*).
3. With regards to claim 3, Brightwell teaches through Fauconnier a method wherein the frame counter is congruent to the sequence counter modulo 256 (see *column 10, line 25, Fauconnier*).

4. With regards to claim 5, Brightwell teaches through Fauconnier a method wherein the frame controller is recovered by concatenating the encoded frame counter value with the sequence counter (*see claim 2, Brightwell*).
5. With regards to claim 6, Brightwell teaches through Fauconnier a method wherein the encoded value of the frame counter is 3 bytes in length (*see column 2, line 30, Brightwell*).
6. With regards to claim 7, Brightwell teaches through Fauconnier a method of transmitting messages from a sender to a recipient over a wireless channel, the order of messages being identified by a frame counter having a first component representing an encoded frame counter and a second component representing a sequence counter, said messages including a value representing the sequence counter, the method comprising the steps of: a) establishing an initial value for the frame counter at said sender (*Brightwell teaches initialization; see column 3, lines 29-35, Brightwell*); b) providing the initial values representing said frame counter and said sequence counter to said recipient (*Brightwell teaches initialization; see column 3, lines 29-35, Brightwell*); c) subsequently sending messages including the values of the sequence counter and not the encoded frame counter (*Brightwell teaches messages to be transmitted (i.e. at the sender) are grouped into frames and sequenced; see column 1, lines 46-50 and column 2, lines 31-32, Brightwell*); d) periodically sending messages including the value of the frame counter according to predefined criteria; e) updating the value of said sequence counter (*Brightwell teaches the incrementing of the sequence*

counter for each frame; see column 4, lines 10-15, Brightwell); and f) establishing the next value of the frame counter as the next value in a direction of counting from the current value of the frame counter that is congruent to the sequence counter modulo the size of the sequence counter (Brightwell teaches the incrementing of the sequence counter for each frame; see column 4, lines 10-15, column 2, lines 54-57, and column 4, lines 44-51, Brightwell).

While the Brightwell reference does teach the counting of frames, it does not explicitly cite the counting of frames congruent modulo of the sequence counter size. In the same field of endeavor, Fauconnier teaches such a calculation; see column 10, line 25, Fauconnier. Such calculations help break down packets into sizes that help communication flow. Therefore it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Brightwell with those of Fauconnier for controlling communication; see column 7, lines 26-30, Fauconnier.

7. With regards to claim 8, Brightwell teaches through Fauconnier a method wherein the predefined criteria are when a predetermined number of messages including the value of the sequence counter and not the encoded frame counter are sent (*see column 4, lines 10-15, Brightwell*).
8. With regards to claim 9, Brightwell teaches through Fauconnier a method according to claim 7 wherein the predetermined number is in the range 2 to 10 (*see column 4, lines 10-15, Brightwell*).

9. With regards to claim 12, Brightwell teaches through Fauconnier a method wherein said update is an increment (*Brightwell teaches the incrementing of the sequence counter for each frame; see column 4, lines 10-15 and column 2, lines 54-57, Brightwell*).
10. With regards to claim 13, Brightwell teaches through Fauconnier a method wherein the sender monitors for an acknowledgement of receipt of said message by said recipient and the predefined criteria are when no acknowledgement is received (*see column 2, lines 53-54, Brightwell*).
11. The obviousness motivation applied to claims 1 and 7 are applicable to their respective dependent claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AZIZUL CHOUDHURY whose telephone number is (571)272-3909. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2145

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. C./
Examiner, Art Unit 2145

/Jason D Cardone/
Supervisory Patent Examiner, Art Unit 2145